

ABSTRACT OF THE INVENTION

5 A light controlling film is disclosed, comprising a polymerized
polymer network varying spatially in a direction normal to the film
surface, where the polymerized polymer network is a crosslinked high
molecular weight polymeric material mixed with a low molecular weight
nematic material exhibiting cholesteric liquid crystal (CLC) order, wherein
10 an electric field impressed in the film controls the reflection bandwidth of
circularly polarized light.